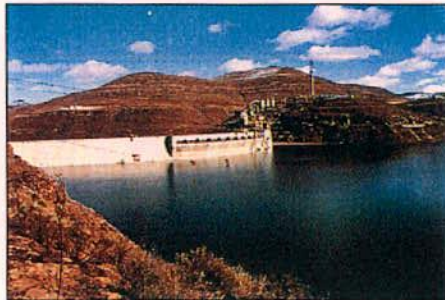


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LESOTHO HIGHLANDS DEVELOPMENT AUTHORITY
ANNUAL REPORT 1996/97

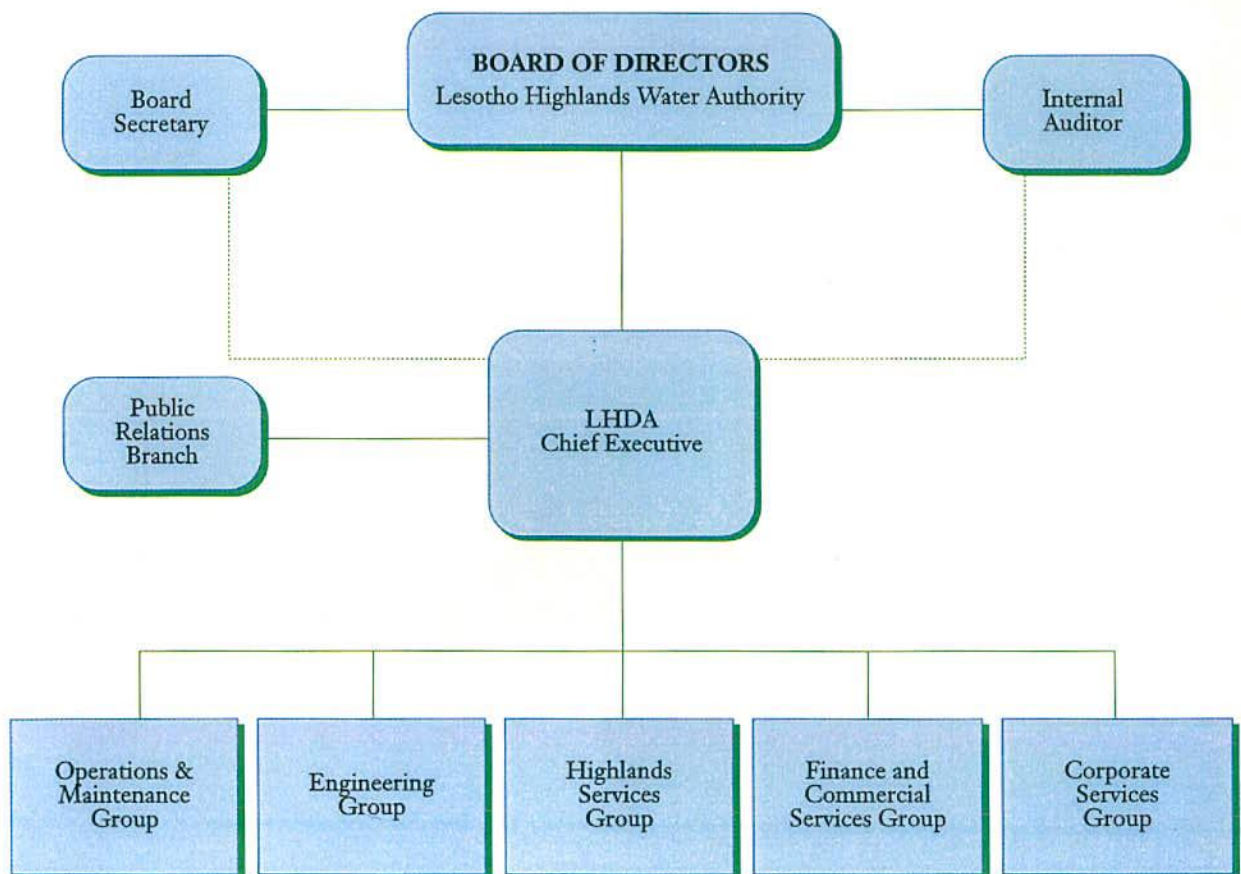




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LHDA ORGANISATIONAL STRUCTURE



CORPORATE GOVERNANCE

The Board of Lesotho Highlands Development Authority subscribes to the values of good corporate governance. In so doing, the Board and the management recognise the need to conduct the enterprise with integrity and in accordance with current best corporate practices. Specifically, the directors report on the following matters:

AUDIT COMMITTEE

The Audit Committee became established during the current financial year but, its activities will only commence in the new financial year. It is composed of non-executive board members who will meet periodically with executive management, internal auditors and external auditors to review financial reporting, auditing, internal control and governance matters, to ensure that an effective control environment is maintained in the Authority.

CORPORATE CODE OF CONDUCT

The LHDA is committed to the highest standards of ethical behaviour, and the Authority's Code of Conduct gives clear guidance on the expected behaviour of all employees. The code is contained in a Code of Conduct for Directors and in Personnel Regulations for all other employees.

INTERNAL AUDIT

Internal Audit is an independent appraisal function established to evaluate the quality of the Authority's operations with particular emphasis on systems of internal control. This scope of Internal Audit's responsibilities encompasses reviewing the adequacy and effectiveness of internal controls to ensure:

- the reliability and integrity of financial and operating information;
- compliance with policies, plans, procedures and laws;
- the safeguarding of resources;
- the economic and efficient use of resources;
- the achievement of established goals and objectives.

Internal Audit is responsible to the Audit Committee to which it has unrestricted access. Also there are no restrictions on the scope of internal audit work.

OPERATING PROCEDURES

Operating procedures encompassing all LHDA operations are in the process of being updated or developed. These will provide essential guidance and standards to all employees in the operation of LHDA's systems.

CHAIRPERSON'S STATEMENT



H M Mhlanga
CHAIRPERSON

During the past year Phase 1A construction has continued as planned and construction of both Katse Dam and 'Muela Dam will be complete in the summer of 1997. The Transfer Tunnel and Delivery Tunnels are complete and watering up and commissioning will start in September. Katse Reservoir continues to impound and is now 90% full. Delivery of water to the Republic of South Africa will commence on schedule in early January 1998. Construction of the 'Muela underground powerhouse and associated tunnels is well underway with turbine installation just commencing.

Phase 1B is also proceeding according to plan. All geological and other investigations of the sites have been completed. The assessment of the water yield of the Phase 1A and Phase 1B reservoirs has been updated to include recent hydrological information and the height of Mohale Dam and full supply level of Mohale Reservoir have been confirmed.

Engineering studies including seismicity, reservoir sedimentation, rock durability, construction materials availability and site access requirements are all complete. The measures necessary to minimise environmental and sociological impact of construction and to ensure the health and safety of construction workers have been defined. Cost estimates and construction programmes have been prepared. Access roads, construction power, communications facilities, townsites, camps, site offices and other infrastructure for the Phase 1B works are all currently under construction.

Tender design and the preparation of tender documents for the Mohale Dam and Tunnel and Matsoku Weir and Tunnel are in the most part complete. Experienced international contractors, many in joint venture with local contractors, have been prequalified for the three main construction contracts. Tender documents for the Mohale Tunnel and Matsoku Weir and Tunnel contracts have already

been issued to the contractors and those for the Mohale Dam will be available in July 1997. All is set for construction of the Phase 1B works to commence in early 1998.

LHDA in preparation for the implementation of Phase 1B of the project, and in order to maintain good corporate governance and performance, has also instituted a number of changes in the organisation, in line with its changing functions.

Some of the most significant changes during the year include the establishment of an Audit Sub-Committee composed of non-executive members, to review financial reporting and quality, internal control and governance matters, to ensure effective control is maintained in the LHDA.

In the same period the transformation of the Environment Division into the Highlands Services Group, to cater for the needs of those who will be impacted by the project, was started. This includes continuation of services in the Phase 1A area and the planning and initiation of development and services to the Phase 1B area.

Resettlement of villagers whose homes have been affected by the development of the Project continued to be a challenge which LHDA is tackling successfully in partnership and consultation with the affected communities.

One particular success that deserves special mention is the resettlement of the villagers of Mapeleng where houses cracked because of seismic movements induced by the impounding of Katse reservoir.

Substantial progress was achieved in completing replacement housing of Phase 1A along the power lines and in the Katse catchment area. Infrastructure

services such as roads, water supply and community facilities in the form of markets and community halls were provided in seven villages affected by the Project.

Planning of the environment and social components of Phase 1B has progressed to schedule.

The Environmental Impact Assessment (EIA) for Phase 1B, which was completed, has been widely accepted as an example of international best practice. A preliminary version of the Environment Action Plan, including detailed resettlement planning, was also developed.

A total of 66 200 x 20 kg bales of fodder were distributed to over 30 villagers in 'Muela and Katse catchments and 1 800 tons of maize and 54 tons of beans were procured from local farmers for distribution to affected communities. Cash payments amounting to over half a million Maloti have been made as compensation for trees inundated by Katse Reservoir, or destroyed through construction of rural feeder roads on Phase 1A and of the Mohale Access Roads and Maseru bypass on Phase 1B.

Public health activities during the period ranged from health promotion to disease prevention.

Plans and activities have also begun in the Phase 1B area, to ensure that basic public health infrastructure is in place before the Stage 1 resettlement takes place. The public health teams have been fully integrated with the field operations teams, which are now operational from bases at Katse, Lejone, 'Muela and Mohale.

I wish to express my sincere and heartfelt gratitude to all those through whose effort, commitment and dedication we have achieved the milestones which we have, and especially the Government of Lesotho for their support and leadership.

CHIEF EXECUTIVE'S STATEMENT



M Marumo
CHIEF EXECUTIVE

I am pleased to be able to report on the progress of the LHDA for the year 1996/7.

The work and challenges of the LHDA can be considered in three ways: the civil engineering works; the benefits for Lesotho both environmental and economic; and the future organisation;

Firstly, the civil engineering works.

Phase 1A is nearing completion, with Katse Dam ready to be handed over to the LHDA as substantially complete on 7 May 1997. The dam was full to a level only 18 m below the full supply level of 2 053 m above sea level (masl) as at the end of March. Work has also proceeded apace on the transfer tunnel lining, which was 99% complete by the end of March. Commissioning of the tunnel will commence in September 1997, and the water transfer part of Phase 1A will be complete in January 1998. Preparations are under way for an important opening ceremony at that time.

The 'Muela hydroelectric power station is also making good progress, comparable with the water transfer works above. 'Muela Dam will be ready for impounding in July 1997 and will be handed over in January 1998, and the 'Muela bypass is on schedule. Power is expected to be produced in mid 1998.

Preparations for Phase 1B have accelerated during the year under review. Work has been finalised on the tender designs for Mohale Tunnel and Matsoku Diversion, and the tenders were sent out to requalified tenderers. Tender documentation was being completed on Mohale Dam. Meantime the infrastructure required for Mohale made good progress, including the access roads and the Maseru bypass, and construction power and telecommunications.

Secondly, the benefits for Lesotho.

I am pleased to report that the minimum operating level for Katse Dam of 1993 masl having been

reached in September 1996, royalties are now being paid on a monthly basis by South Africa. In respect of the period up to March funds amounting to Maloti 157 million have been paid into the Lesotho Highlands Development Fund.

As part of the commitment to ensure that the affected communities are not disadvantaged by the project, the LHDA has built 78 replacement houses via eight separate contracts which were all awarded to local Basotho contractors.

The infrastructural improvements for Lesotho, viz access roads, telecommunications and power lines are plain to see and will be of lasting benefit to the whole of Lesotho. The LHDA is also building feeder roads around the whole of Katse Dam and reservoir crossings for the benefit of the local people and to help tourism.

The LHDA hosted donor missions in November 1996 in which pledges for around M800 million were received for concessional funding for Phase 1B. Mechanisms exist for the cash benefit of such funding below World Bank rates to be provided to Lesotho directly.

Many studies have been undertaken to ensure that best international practice applies to the project. Of special note in the year under review is the Economic Impact Assessment, the LHDA/LEC Interface Study update, Instream Flow Requirements Study, and Resettlement and Development Study. I am confident that putting the practical recommendations of these studies into operation will enable the project to register all-round success far beyond its considerable technical achievements.

Thirdly, the future organisation of the LHDA.

A lot of attention has been devoted to the requirement for the LHDA to change from an organisation skilled at implementing infrastructural and civil engineering projects to an operation

maintaining the dams and tunnels and running the power station. An Organisation and Manpower Study has advised the LHDA on the new structure that would be appropriate on completion of the major works for Phase 1B. As certain milestones are passed, for example the negotiation of the loans and raising of finance, or the award of the contracts for the major works, so the requirement for certain skills reduces. At the same time the need for the LHDA to improve its on-the-ground contact with the chiefs, NGOs and communities in the project area is increasing. And to prepare to run the 'Muela power station and maintain the civil works.

Therefore the LHDA Environment Division is being changed into the Highlands Services Group, with a mission to be closely associated with those people in the Highlands whose lives are being impacted so significantly by the project. Attention is being given firstly to compensation and resettlement, secondly to the building and improvement of schools and medical services, thirdly to rural development, and finally to the protection of the natural environment and heritage.

We are changing our operations from being purely project implementation to operations and maintenance of facilities created by the Authority in the past ten years. To this end staff are receiving an appropriate training in preparation for these new operations. Further consolidation will take place in areas of Finance and Administration, and plans are advanced for the construction of long term headquarters for the LHDA.

The strategy for the next year is to institute a significant process of change management. I hope this will enable staff members to understand their changing roles and to welcome and be prepared for the challenges that such changes bring.

I would like to conclude by expressing my appreciation to all staff and my colleagues on the Board for their continued efforts to achieve the success of the Lesotho Highlands Water Project.

MAJOR WATER TRANSFER CONTRACTS

CONTRACT LHDA 123

TECHNICAL CHARACTERISTICS

ESTIMATED FINAL COST

VALUE OF WORK COMPLETE

FINANCIAL PER CENT COMPLETE

REVISED CONTRACT COMPLETION DATE

CONTRACTOR

- KATSE DAM AND APPURTENANT WORKS

- Concrete Double Curvature Arch Dam, 185 m high, crest length 710 m, concrete volume 2 329 744 m³

- M1 319 618 299

- M1 144.7 million

- 86.7%

- 7 May 1997

- Highlands Water Venture

PERMANENT WORKS

Katse Dam

Concrete placement reached 2 325 084 m³ by 31 March 1997 representing 99.8% of total dam volume. This is some 15 weeks behind the Clause 14 Revision 2 programme based on the volume of concrete placed. All 36 blocks have now been completed to non-overspill crest elevation of 2 060 masl and all 11 spillway blocks have been completed to elevation 2 053, the full supply level.

The impounding of the reservoir continued during the reporting period. The reservoir level at the end of March 1997 was 2 035.8 masl which corresponds to a reservoir volume of 1 394 million m³. It should be noted that the authorised impounding level was 2 037 masl.

Instrumentation

Instrumentation continued as appropriate to dam progress and no unusual results were obtained from instruments in operation.

Grouting

Primary Joint Grouting was completed to Compartment A-Crest (ie. to 2 052).

Tailwater Dam and Plunge Pool

The Tailwater Dam has been completed and the plunge pool is operational.

Mini Hydro Power Station

The civil works are complete.

Mohale Tunnel Outlet Access Road

This road has been completed. Access for all users has been maintained, including the Feeder Road Contractor. The taking over certificate for this section of the works was issued at the end of March 1997.

Downstream Access Roads

Major earthworks on left and right banks continued and layer works are in progress.

Northern Access Road

Maintenance of this road continued.

Mashai Tunnel Outlet

Work to the Mashai Tunnel Outlet was substantially complete with access provided via the shaft.

Mohale Tunnel Outlet

The tunnel concrete lining and Gate Chamber have been completed.

Post-Cooling

The cooling system continued to work satisfactorily.

CONTRACT LHDA 124/5 – TRANSFER TUNNEL

TECHNICAL CHARACTERISTICS	– 45 km long, 4.95 m diameter tunnel excavated by three tunnel boring machines (TBMs) through primarily basalt rock with a maximum rock cover of 1 200 m. Concrete lining of the entire 45 km to a finished diameter of 4.35 m as per the Modifying Agreement signed in September, 1994.
ESTIMATED FINAL COST	– M1 339 874 438
VALUE OF WORK COMPLETE	– M1 086.80 million
FINANCIAL PER CENT COMPLETE	– 81.1%
CONTRACT COMPLETION DATE	– 19 January 1998
CONTRACTOR	– Lesotho Highlands Project Contractors

PERMANENT WORKS

Tunnel Lining

By the end of March 1997, a total of 44 789 m of the Transfer Tunnel had been concrete lined. This is 99.6% of the length to be lined. The remaining works in the tunnel are the intersection works at the Adits, the full round lining with membrane at 'Muela and the painting of the steel liners at 'Muela and Pelaneng. At present, it is anticipated that wet commissioning of the tunnel will commence at the end of September, 1997.

Intake Tower

The Intake Structure is substantially complete except for the final snag list (concerning both mechanical and electrical items) which is being finalised by the Contractor.

Overall progress on the structure is 99.94% complete.



1 CONSTRUCTION (CONTINUED)

CONTRACT LHDA 126 – DELIVERY TUNNEL SOUTH

TECHNICAL CHARACTERISTICS	– 14 km long tunnel with 5.10 m diameter section excavated using one TBM and two steel lined inverted syphons under rivers at 3.4 m diameter (excavated by drill and blast method).
ESTIMATED FINAL COST	– M327.15 million
VALUE OF WORK COMPLETE	– M308.2 million
FINANCIAL PER CENT COMPLETE	– 94.2%
CONTRACT COMPLETION DATE	– 31 December 1996
CONTRACTOR	– Lesotho Highlands Project Contractors

PERMANENT WORKS

The construction contract commenced on 1 February 1991. In terms of the original Clause 14 Programme, the Taking Over Certificate was to have been issued on 1 January 1997. It now seems likely that this certificate will only be issued at the end of June 1997.

The works are substantially complete except for installation of the magnetic flow meter and a number of minor items.

HYDROPOWER CONTRACTS

CONTRACT LHDA 129A – CONSTRUCTION OF UNDERGROUND POWER FACILITIES

TECHNICAL CHARACTERISTICS	<ul style="list-style-type: none"> – 9.0 m upper internal diameter and 16 m lower internal diameter by 150 m high upstream surge shaft excavated in rock with concrete lining. – 3.35/2.5 m diameter power tunnel/steel lined vertical shaft and penstock – total length 258.4 m. – 14.5 m wide x 58.8 m long x 27.5 m high underground powerhouse cavern for three turbine generator units. – 4.10 m x 1 350.7 m long tailrace tunnel and channel.
ESTIMATED FINAL COSTS	– M171 483 138
VALUE OF WORK COMPLETE	– M94 416 548
FINANCIAL PER CENT COMPLETE	– 55%
CONTRACT COMPLETION DATE	– 22 September 1998
CONTRACTOR	– 'Muela Hydropower Project Contractor (MHPC)

PERMANENT WORKS

Upstream Surge Shaft

Installation of the reinforcement to the bottom of the Cone has begun and pouring of concrete has commenced.

Valve Chamber and Access Tunnel

The blinding for the portal structure is continuing. At the external section, all six slabs and one back wall pour have been completed. Three slabs, 15 walls and eight soffits in the external section are remaining.

Upper Penstock and Penstock Shaft

The installation of spools at the rate of two per week is in progress.

Cable Lift Shaft

After some delays the slipform Contractor mobilised. The central lift compartment was concreted to elevation 1 768 masl.

Main Access Tunnel and Powerhouse Cavern

The clearing of material from the invert of the tunnel next to the Transformer Chamber has started and concrete blinding is underway. In the Powerhouse Cavern, the placement of reinforcement at the Machine Hall floor level has begun. The remaining walls at Turbine Floor level have been completed. Placing of scaffolding for the Generator Floor slab is in progress and it is approximately eight weeks behind the working programme.

Unit 1 - the reinforcement for the Valve Floor slab to the edge of Unit 2 was placed and the slab has been concreted. The Valve Floor walls as well as the Spiral Casing foundation block was concreted and work progressed.

Transformer Chamber and Auxiliary Galleries

Drilling of holes for anchors to hold the wire mesh which is required for the second layer of shotcrete is in progress.

Lower Penstocks and Manifolds

Installation and concreting of spools in upstream manifold 1&2 is continuing. All the downstream manifolds are complete and the Contractor will grout when he can suitably mobilise his equipment.

Downstream Surge Shaft and Chamber

The shutter is continuing to be installed for the Downstream Lower Chamber. Blinding in the Upper Chamber and Access Tunnel continued with concreting of the Downstream Surge Chamber.

Tailrace Tunnel and Outfall

Mobilisation of the shutters for the Tailrace Tunnel up to the Downstream Surge Shaft Chamber and pouring of concrete towards the Tailrace Construction Adit has started. It is intended to finish lining of the tunnel by the middle of 1997.

Bypass

Improvement to the production occurred in March for the chute, the Stilling basin and the Dissipation Structure.

Steel Lining

The cavity grouting of the steel liner is around 88% complete with close liaison having been undertaken with Contract LHDA 124/5 with respect to the intersection. Water pressure testing is now ongoing following completion of cavity grouting.

1 CONSTRUCTION (CONTINUED)

CONTRACT LHDA 129A – CONSTRUCTION OF UNDERGROUND POWER FACILITIES (CONTINUED)

Bypass Channel

The Dissipation Structure remains on programme with the side walls and floor slab of the valve floor area completed.

Reinforcement on the main basin continues.

Progress on the chute has improved and work is on schedule.

Work has restarted in the stilling basin with commencement of reinforcement.

Cleaning continues slowly with work being affected by flood water.

Gabion construction is proceeding well with over 70% completion.

Contractor's M&E Works

All M&E works are being manufactured and steel liners have arrived and are being installed.

The Bypass valves are also on site. The Tailrace Gate is substantially complete and is currently being commissioned.

CONTRACT LHDA 129B – CONSTRUCTION OF 'MUELA DAM AND APPURTENANT WORKS AND OPERATIONS BUILDING

TECHNICAL CHARACTERISTICS

- 55 m high, 200 m crest length concrete double curvature arch dam.
- Surface works, site infrastructure and temporary housing.
- Surface Operations Complex with control, administration and service areas, civil works for workshop and substation.
- National Control Centre at Maseru.

ESTIMATED FINAL COST

- M139 443 627

VALUE OF WORK COMPLETE

- M113 085 174

FINANCIAL PER CENT COMPLETE

- 78.72%

CONTRACT COMPLETION DATE

- 30 January 1998

CONTRACTOR

- 'Muela Hydropower Project Contractors (MHPC)

PERMANENT WORKS

'Muela Dam

The Contractor's revised working programme indicates that the dam will be ready for impounding by July 1997. It is considered that this date is achievable.

Progress on the concreting of the dam wall has been extremely slow due to the complex nature of the shuttering of the ogee weir. Concrete volume reached 62 181 m³ by the end of March representing 99% of total dam volume. 4 195 m³ of concrete has been poured to date in the stilling basin representing 84% completion.

Progress on concrete works to the bottom outlet tower was slow with only one pour being cast in a month bringing the tower within four lifts of completion.

The contraction joint grouting temperature of 11°C was reached in Compartment C and all contraction joints were successfully grouted.

Compartment D post cooling continued with chilled water to the end of March.

The foundation treatment works are progressing well with all drilling and grouting works in Compartments A and B completed. Work is now progressing into Compartment C in Gallery G on both the left and right banks. The tectonic joint passing under the dam in Block 5 has been successfully sealed. The main drainage curtain in the central blocks is progressing well. The sub-contractor continues to drill drainage patterns on the left abutment that are available to be drilled prior to main grout curtain grouting being completed.

The consolidation grouting on the right abutment is nearing completion. Also drilling works for the secondary rock anchors have commenced on the right abutment downstream of Block 8. The exploratory adit lining is completed but has still to be grouted releasing the final few holes of the consolidating grouting above.

Good progress has continued in the cascades with structural concrete completed to the debonded joint at 1 733.5 masl. Work is now ongoing fixing reinforcing on the first upstream sections of the cascade slabs.

Bottom Outlet Works

The manufacture, inspection and testing of the sleeve valve has been completed and it was delivered to site.

Operations Building & NCC

Final defects checking of the internal works to the Operations Building is ongoing with a view to completion at the end of April. LHDA personnel will move into the building during May 1997.

CONTRACT LHDA 134 – TURBINES, GENERATORS AND ANCILLARY PLANT

TECHNICAL CHARACTERISTICS	– 3 Nos. Francis Turbines, 3 Nos. Turbine Governors, Turbine Inlet Spherical Valves, 3 Nos. Draft Tube Flap Gates, 3 Nos. Synchronous Generators.
ESTIMATED FINAL COST	– M132 487 673
VALUE OF WORK COMPLETE	– M56 823 625
FINANCIAL PER CENT COMPLETE	– 42.9%
CONTRACT COMPLETION DATE	– 22 September 1998
CONTRACTOR	– ABB Kvaerner Boving Consortium

The Contractor was requested to review the civil Contractor's latest working programme and also a list of planning dates. A draft programme of work based on these planning dates had been produced to enable joint discussions with the Civil Contractor with the aim of meeting the needs of the contracts in the contract period.

CONSTRUCTION STATUS (PROCUREMENT/FABRICATION)

Procurement and Fabrication Activities

The following mechanical components are being shipped to site:

- turbines
- shafts and shaft seals
- guide bearings
- regulating rings
- pumps and strainers

1 CONSTRUCTION (CONTINUED)

CONTRACT LHDA 134 – TURBINES, GENERATORS AND ANCILLARY PLANT (CONTINUED)

INSTALLATION/COMMISSIONING Electrical/Mechanical

At the Operations Building and Substation work continued on:

- laying of power and control cables
- connection of power and control cables
- erection of emergency Diesel Generator set
- installation of servomotor anchor plates for draft tube flap gate Unit 1 and 2

CONTRACT LHDA 135 – TRANSFORMERS AND 132 KV SWITCHGEAR

TECHNICAL CHARACTERISTICS	- 3 Nos. Unit Transformers having rated output of 32MVA, rated low voltage of 11kV, rated high voltage (no-load) of 138kV, Regional Transformer 132/33kV, 20MVA, Area Transformers 5MVA.
ESTIMATED FINAL COST	- M18 484 055
VALUE OF WORK COMPLETE	- M15 444 877
FINANCIAL PER CENT COMPLETE	- 83.69%
CONTRACT COMPLETION DATE	- 22 September 1998
CONTRACTOR	- ABB Calor Emag Schaltanlagen Ag

According to the contractual key dates, the underground transformer bay should be ready for handing over by 1 April 1997. This date, however, had to be postponed due to delay in the civil work.

CONSTRUCTION STATUS (PROCUREMENT/FABRICATION)

Procurement and Fabrication activities

Practically all equipment has now been packed and placed in store with the Contractor.

INSTALLATION AND COMMISSIONING ACTIVITIES

Electrical commissioning of GIS Switchgear was postponed to April 1997. Installation of the remaining work was completed.

CONTRACT LHDA 136 – TRANSMISSION LINE AND SUBSTATION BAYS

TECHNICAL CHARACTERISTICS	- 132kV Double Circuit Transmission line (62 km), 3 Nos. Line Bays, Complete Protection System for substation.
ESTIMATED FINAL COST	- M27 327 896
VALUE OF WORK COMPLETE	- M9 323 000



FINANCIAL PER CENT COMPLETE	- 34.12%
CONTRACT COMPLETION DATE	- 13 June 1998.
CONTRACTOR	- NORELEC

The Contractor has provided a programme of work for the transmission line. All designs have been completed and approved. Exact definitions of foundations are expected to be done at site according to soil conditions discovered during excavation.

PROCUREMENT AND FABRICATION ACTIVITIES

Tests for major transmission line equipment have been finalised. However, still outstanding is the test for fittings. Tests for substation switchgear have been envisaged and programmes provided.

INSTALLATION AND COMMISSIONING ACTIVITIES

- Pegging of all 181 tower locations completed.
- Soil investigations for substations Maputsoe and Mabote completed.
- Soil investigation for transmission line: ten have been carried out, 24 additional investigations have been requested in order to cope with the specification to test 1 in 5 tower sites.
- Excavation of eight foundations completed. However, this is only 50% of the planned figure.
- Concreting of the first foundation to start on 2 April 1997.

SUPERVISION OF MAIN CONSTRUCTION CONTRACTS

CONTRACT LHDA 45 – KATSE DAM AND TRANSFER TUNNEL

Supervision continues on both tunnel and dam construction. The actual cost of site supervisory staff is in line with the budget.

CONTRACT LHDA 46 – DELIVERY TUNNEL SOUTH

Supervision of the Delivery Tunnel South is continuing with gradual reduction of staff directly proportional to the reducing works.

CONTRACT LHDA 51 – PREPARATION OF CONSTRUCTION DRAWINGS AND SUPERVISION OF CONSTRUCTION OF 'MUELA HYDROPOWER PROJECT

Supervision of the Hydropower Projects by LMC Staff is ongoing.

Progress on the detailed design and preparation of construction drawings is continuing and timeous issuing of information to the contractor is being maintained. This involves revision of architectural drawings for the powerhouse, drawings for the bypass bridges and all drawings for permanent access road.

The staff of LHDA's Planning and Design Division have continued to concentrate their efforts on the engineering activities related to the implementation of Phase 1B. Assistance has been given to the Construction Division where and when requested with respect to technical aspects of Phase 1A construction contracts.

PHASE 1A ACTIVITIES

WATER TRANSFER

KATSE DAM

Monitoring of the reservoir induced seismicity in the area continued. An air photo interpretation of geological lineations including ground truthing around the reservoir was essential to establish the locations of significant features.

HYDROPOWER

Only the grouting of the penstock lining was reviewed.

PANEL OF EXPERTS

The Phase 1A Panel of Experts made two visits to review the progress of the Phase 1A work; the first in June 1996 and the second in February 1997.

Contract No. LHDA 119C – LHWP Communications System-Operations and Maintenance

The main network has been functioning satisfactorily. However, problems were experienced at 'Muela and Hlotse due to traffic congestion at Leribe in the LTC exchange; generally as a result of incompatibility with the contractor's PABX. The security arrangement at the communications repeater stations has been very good.

Contract No. LHDA 152 – Construction Power Station

LEC has been operating and maintaining the system without any problem. The planned month-end outages have worked very well.

Contract No. LHDA 155 – Construction of Replacement Housing in Corridor, Mabote to Caledon River

One house owner engaged an independent contractor whilst the other seven were handled through LHDA. These seven houses have been completed and handed over to the owners.

Contract No. LHDA 158A – Construction of Replacement Housing from Masele Village to Mositi Village

A major portion of the work was handed over to LHDA on 27 August 1997. Six months defect liability period ended in February, 1996. The required defects inspection is pending.

Contract No. LHDA 158B – Construction of Replacement Housing from Tabolane Village to Tjoeng Village

A major portion of the work was handed over to LHDA on 27 August 1997. Six months defect liability period ended in February, 1996. The required defects inspection is pending.

Contract No. LHDA 158C – Construction of Replacement Housing from Masaleng Village to Tefo Village

Two additional houses were built under a variation order to this contract. These were handed over to the owners in March 1997.

Contract No. LHDA 158D (I) to D (iv) – Replacement Housing from Ha Lejone to Ha Seshote

Tenders were received in September 1996 but work only started in January 1997. However, work progressed well. Problems with non-payment of contractors' invoices were resolved by LHDA. These have resulted in an extension of one month to the completion date of March 1997.

Contract No. LHDA 158E – Construction of Replacement Housing along Transmission Line from Ha 'Matli to Butha-Buthe Village

A major portion of the work was handed over to LHDA in August, 1996. Six months defect liability period ended in February, 1997. The required defects inspection is pending.

Contract No. LHDA 174A – Construction of Replacement Housing in Katse Reservoir (Accessible by Road)

Defects in the work have been identified and are being remedied.

Contract No. LHDA 174B – Construction of Replacement Housing in Katse Reservoir (Inaccessible by Road)

The defects liability period of the Phase I work was extended to May, 1996. All defects in the work were remedied.

Phase II of the Katse Reservoir Shoreline Replacement Housing was implemented. Work achieved the required acceleration programme and all houses were handed over to the owners. The defects liability period of this work ended in March, 1997.

Contract No. LHDA 501 – Processing and Analysis of Data from Katse Reservoir Seismic Network

A new digital station was established at Katse Dam Site in May 1996. A full time seismic analyst was stationed at Katse. A draft contract between LHDA and the Council for Geoscience was reviewed and commented on by LHDA. Seismic events continued to occur around Katse Reservoir and were detected by the existing system. LHDA engaged a geologist who is undergoing hands-on training as a seismic analyst at Katse.

Contract No. LHDA 512 – Architectural Design and Supervision

The Architect has continued to supervise the construction of houses under Contract Nos. LHDA 158D(i) to 158D(iv). Negotiations on Contract Nos. LHDA 174C to H are due to be finalised in April 1997. Construction is programmed for four months.

Contract No. LHDA 590 – Katse and 'Muela Information Centres

Tender invitations were issued in January 1997 with the tender closing date set for March, 1997. Four submissions were received from Lesotho based architectural firms. Technical evaluation was completed in March, 1997.

PHASE IB ACTIVITIES

PANEL OF EXPERTS

The separate Phase IB Panel of Experts reviewed the Phase IB engineering works in June and again in November 1996.

Contract No. LHDA 1017 – Mohale Dam Tender Design

The engineering design and the preparation of tender documents has progressed on schedule during the period.

Further geotechnical investigations of the dam site were conducted under contract from July 1996, and by March 1997 all site work had been completed with only a few laboratory tests outstanding.

The consultant submitted a report on a yield assessment study of all Phase I works which also confirmed the full supply level of the Mohale reservoir. The conclusions and recommendations of this and other reports on the dam layout, reservoir sedimentation studies, seismic design parameters, geotechnical design (interim report), preliminary engineer's cost estimate, environment, infrastructure requirements, environmental impact assessment and the environmental management plan were all accepted by LHDA.

A report containing technical design memoranda was also received. This described the basis of the design, the design methods and gave details of the proposed structures.

Prequalification documents were prepared and issued to 37 contractors. Submissions were received from ten joint venture and independent contractors and were being evaluated.

Emergency preparedness plans for Katse, 'Muela and Mohale dams were prepared, together with a proposed implementation plan under a variation order. These are under review by LHDA.

2 STUDIES AND ENGINEERING DESIGNS (CONTINUED)

Contract No. LHDA 1009 – Mohale Tunnel Tender Design

The geotechnical site investigations and the tender design were completed.

Reports were received from the consultant (LHTP) and accepted by LHDA on tunnel conditions, tunnel lining, basalt durability, infrastructure, reservoir filling, commissioning and dewatering, engineer's cost estimate, health and safety on site, personnel and social aspects, and the environment management plan.

Prequalification documents were prepared and issued to 59 contractors. Submissions were received from 16 joint venture and independent contractors – of these seven were prequalified.

Stage 1 design was essentially completed by January 1997 when copies of the tender documents were issued to the seven prequalified joint ventures. The site visit and pre-tender meeting was held in March 1997. Four addenda were issued.

Contract No. LHDA 1013 – Matsoku Diversion Tender Design

The geotechnical site investigations and the tender design have been completed.

Reports were received from the consultant (MDP) and accepted by LHDA on design basis; insitu stresses; flood hydrology; relationship between the instream flow requirements and the Matsoku diversion; surface mapping of the tunnel alignment, tunnel lining; tender design; concrete aggregates; access roads; infrastructure requirements; construction programme update; engineer's cost estimate; health and safety on the site; personnel and social aspects; and the environmental management plan.

Prequalification documents were prepared and issued to 18 contractors/joint ventures. Submissions were received from 13 joint venture and independent contractors – of these eight were prequalified. Tender documents were issued to the prequalified contractors in March 1997.

Contract No. LHDA 1014 – Construction Power Design and Supervision

The consultant assisted with the evaluation of tenders for the four construction contracts as well as with the negotiations with the preferred tenderer.

The consultant is supervising the construction contracts satisfactorily.

An agreement was reached with LEC on the rationalisation of the transmission lines in the central region. However LEC has completed its 33kV line in violation of the agreement.

Contract No. LHDA 2014 – Phase 1B – Construction of Construction Power Supplies

Contract LHDA 2014A, B and C were signed with Consolidated Power Projects (Pty) Ltd, (CONCO) of South Africa. Mobilisation was completed on schedule and work is under way at the various sites.

Contract LHDA 2014D was signed with ABB Feralin (Pty) Ltd and work is also on schedule.

Contract No. LHDA 1018/2016 – Construction Communications

LHDA and LTC agreed to join forces in upgrading the existing Maseru – Thaba-Tseka link.

A site visit and pre-tender meeting was held in early January 1997. Only two tenders were received in February 1997. Tender evaluation was carried out and at the end of March 1997 conditional approval was received from the LHDA Board to negotiate with the preferred tenderer. The Board condition is that the LTC portion of the costs be guaranteed by GOL.

Contract No. LHDA 1023 – Economic Impact of LHWP

The survey was completed and a draft report received in April 1996. Comments from stakeholders were discussed at a workshop held in April 1996 where the consultant presented his findings and recommendations.

The econometric consultant held a two-week session on the use of his model for both LHDA and the Central Bank of Lesotho. The final report was submitted in May 1996. One of the most important tasks is to maximise the involvement of Basotho companies in the Project, and a start was made in March, 1997 when a number of organisations made presentations at the Mahale Tunnel contract pre-tender meeting.

ECONOMICS OF PHASE 1B

The study of the economics of Phase 1B commenced in August 1996 using as a basis the environmental input data agreed earlier with the World Bank. Representatives of the World Bank were consulted at various times during the progress of the study. The consultant submitted his final report in February, 1997 which was reviewed by LHDA and the World Bank. The study estimates that the rate of return of the project will be 17.7% which is higher than the 8 to 10% generally considered acceptable for projects of this nature.

Lesotho Electricity Masterplan (GOL Contract)

The report of this study has finally been submitted by the consultant to the Department of Energy. The study steering committee is continuing to meet as a subcommittee to the Power Sector Policy Committee to implement the study recommendations in the context of the two other studies related to the power sector in the country. The Committee's main tasks has been to formulate power policy elements in the following areas: de-monopolisation of the power sector; tariffs and connection fees; and power sector investment programme.

Contract No. LHDA 650 – LHDA/LEC Interface Study

The European Investment Bank (EIB) approved the study terms of reference for Contract No. 650.

The study progressed well and the consultant submitted the draft final report in February, 1997. The report was distributed to all relevant parties for comments and information. The consultant also conducted a successful training workshop on tariffs and load forecast for a group of both LHDA and LEC personnel during February 1997. LHDA comments on the report were communicated to the consultant for his consideration.



The Katse Dam releasing compensation water for downstream areas.

LHWP HYDROLOGY

The joint study on the hydrology of the LHWP was completed by LHDA and DWAF/BKS experts. The data has been used for the tender design of Phase 1B studies and works. Further the review of the stage-discharge relation at high flows for Senqunyane River at Marakabei has been finalised.

WATER RESOURCES MANAGEMENT POLICIES AND STRATEGY STUDIES

The final report submitted by the Consultant TAMS has been approved by the steering committee as the baseline study for Lesotho's Water Resources Management Policies and Strategies.

The policy document was then prepared for adoption by the Government. This is currently under review by the World Bank and it is still to be presented to stakeholders and communities.

ROYALTIES

Having reached the 1993 masl water level in the Katse reservoir, royalty payments due to Lesotho were computed on the basis of stage 2B hydrology.

ROUTINE ACTIVITIES

Operations pertaining to data collection, repair and maintenance of hydrometric stations and the updating of the respective databases were undertaken as well as water quality monitoring of the Katse reservoir.

OPERATION PLANNING MODELS

The inhouse development of the long-term operations planning model of the LHWP reservoirs commenced. This is done in accordance with Treaty Obligation (Ref. Article 7).

OPERATIONS AND MAINTENANCE**Contract No. LHDA 554 – Operations Management Specialist.**

All activities are proceeding on schedule in accordance with the terms of reference. A variation order has been prepared for continuation of the Contract to June 1999.

Contract No. LHDA 538A – Training Utility (ESBI), European Union (EU) Funded

All activities are proceeding on schedule in accordance with the terms of reference. All 30 trainees are performing satisfactorily, and there have been no losses after 15 months of foundation and attachment training in Ireland and RSA.

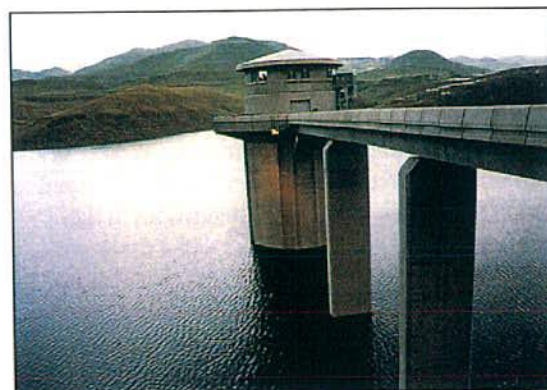
Contract No. LHDA 538B – Training Utility (RoteK/Eskom), Overseas Development Administration (ODA) Funded.

The contract was concluded in December 1996 and training began in January 1997 for Lesotho Electricity Corporation (LEC) and LHDA Staff. The contract is proceeding on schedule with good results. All required recruitment for staff to be trained under this contract has been completed.

MANUFACTURER'S TRAINING PROGRAMMES

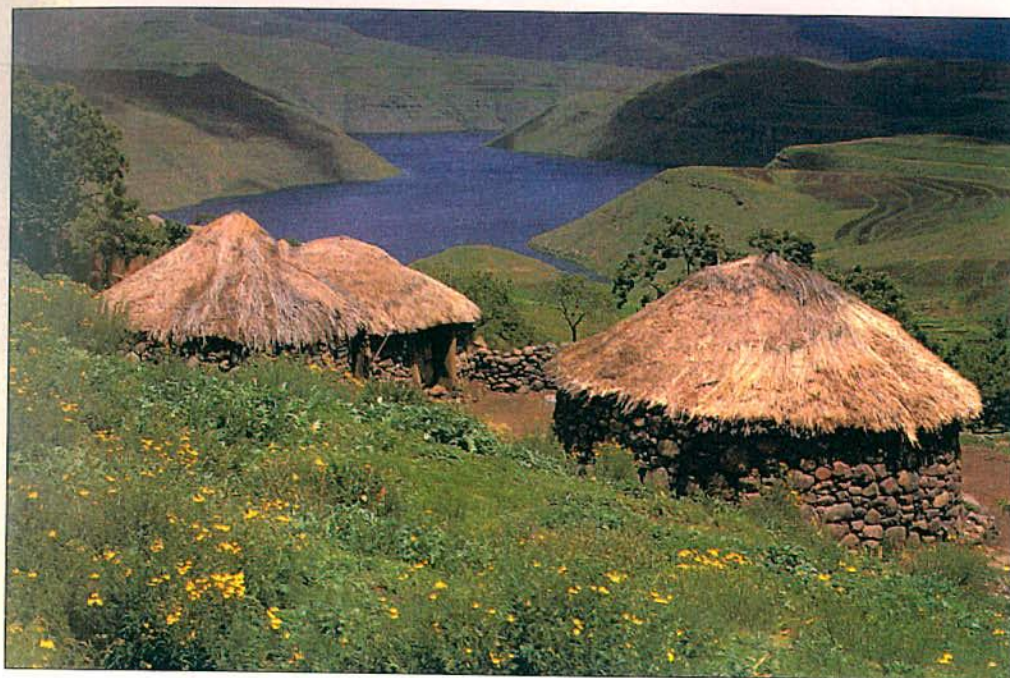
Integration of the manufacturers' training programmes with the above contracts is complete. The factory training in the United Kingdom and Sweden is complete. The site training programmes are being scheduled.

Operations and Maintenance Division continues to work with other divisions of LHDA to implement training programmes for divisions providing support services for the operations phase as well as the establishment of the required systems and procedures.



Katse intake tower.

5 ENVIRONMENT



INTRODUCTION

The period 1996/97 saw deliberate and dramatic efforts towards the establishment of the Highlands Services Group from the current Environment Division. It was thus a period of unusually increased activity and overt uncertainty on the part of the personnel. However it is noteworthy that a lot was accomplished over the period towards the continuation of services in the Phase 1A area and the planning and initiation of developmental services to Phase 1B area.

Whereas the division is still in the transition phase towards the new HSG structure it has itself developed an approach to manage this change to

ensure that the overall direction of the LHDA in the new era of operations and maintenance is maintained and leads to the best standards of performance that will lead to betterment of the lives of clients in the Kingdom of Lesotho and the Republic of South Africa.

The report is presented in sections covering Compensation and Resettlement; Rural Development; Natural Environment and Heritage; and Public Health. It recognises the important role that the Field Operation Teams and Community participation have to play if the Group's objectives are to be met.

5 ENVIRONMENT (CONTINUED)

COMPENSATION AND RESETTLEMENT SECTION

<i>Activity/Task</i>	<i>Achievements This Period</i>	<i>Proposed Future Action</i>	<i>Target Date</i>
1. Compensation payments:			
1.1 Fodder and procurement and distribution	A total of 66 200 x 20 kg bales of Eragrostis Curvula were distributed to over 30 villages in Muela and Katse catchments. Distribution was done in July, August and September 1996.	Review the procurement process for fodder and prepare a recommendation to LHDA Executive and JPTC for approval.	30 November 1997
1.2 Maize and beans procurement and distribution	A total of 1 800 tons maize and 54 tons beans were procured from local farmers. Distribution was done in three parts: main exercise done in October and November, 1996; second portion performed in January, 1997; and the last in March 1997.	Quality control mechanisms to be improved. Timely distribution to be performed in 1997 harvesting season.	1 July to 31 August 1997
1.3 Cash payments	A total of cash payments amounting to over half a million Maloti was effected for trees inundated by Katse Reservoir or destroyed by construction of rural feeder roads in 1A and construction of Mohale Access roads including Maseru By-Pass, in 1B.	Cash payments to be effected throughout the year whenever necessary. Payment schedules to be prepared on time and submitted to Finance Division for processing.	March 1997 to April 1998
2. Compensation Policy Review	LHDA prepared the final Compensation Policy document out of the Resettlement and Development Study in January 1997. This version was approved by LHDA Board in February 1997. The policy document was translated into Sesotho in January 1997 and distributed to Phase 1B affected people and communities in February 1997.	Agree on the compensation procedures and rates. Agreed rates need to be discussed with affected communities. Train the Compensation and Resettlement Task Team.	May 1997 April 1997
3. Replacement Housing Contracts:			
3.1 Contract 155 Mabote Powerlines	A total of seven remaining housing structures were completed and handed over to owners in February 1997. The houses were constructed under LHDA- Contractor arrangement, supervised by Planning and Design Division.	No further action required.	
3.2 Contract 158D: Additional houses: Maputsoe-Katse Powerlines	A total of three housing units were constructed and completed in March 1997. The houses were missed during implementation of LHDA Contract 158C.	Effect Construction of fences, kraals and toilets on all the powerline houses (contracts 158A, B, C and E).	May 1997
3.3 Contract 158D: Lejone-Katse Powerlines	Five housing units are currently being constructed under Owner-Builder arrangement. Two units were completed in March 1997 and the next three are nearly complete.	Monitor construction of remaining houses.	April 1997

Activity/Task	Achievements This Period	Proposed Future Action	Target Date
3.4 Contract 158D: Conventional Contracts	A total of 16 housing units are currently being constructed by building contractors supervised by architects, under technical supervision of Planning and Design Division. The houses are about 90% complete.	Monitor progress and make arrangements to handover houses to owners.	May 1997
3.5 Compensation Sweep-Up houses and repairs:	Two houses out of 18 were completed as of end of March 1997. A total of 116 repairs completed out of 209.	Complete remaining houses. Complete repairs on 93 remaining structures.	June 1997 May 1997
4.0 Compensation Information System maintenance	Three officers of the Compensation Section underwent training in Microsoft Access. The course was meant to equip staff in the day-to-day running of the information system.	Arrange for further training in advanced courses in Microsoft Access and other useful analytical spread-sheets.	November 1997
5.0 Monitoring and Evaluation	LHDA Contract No. 657 was prepared for the purposes of implementing a follow-up survey on the socio-economic status of households relocated along Katse shorelines.	Select consultants and award the contract.	June 1997
6.0 Impact Summary Data Sheets	An up-date on the key environmental and social impacts of the Phase 1A LHWP was completed in February 1997.	Regular up-dates are required as some of the land is currently being acquired under rural feeder roads in 1A and advance infrastructure contracts in 1B.	On-going.

RURAL DEVELOPMENT SECTION

Programme	Activities	Progress	Remarks
1.0 Agriculture	Design and install three irrigation systems.	Two irrigation systems installed. Started design on one.	Changed design of Sentelina system to accommodate seven more farmers.
1.1 Irrigation Engineering services	Maintenance on three systems installed the previous year.	Maintenance work on two (Setibi) and (Beresi) systems.	Both sites had been vandalised on account of reduced water for livestock.
1.2 Seed potato multiplication	Planting seed potato.	17,8 ha in six areas planted	8 ha increase over previous year.
	Marketing seed potato.	Produced 830 x 10 kg pockets and marketed outside project area 256 x 10 kg @ M45,00/pkt.	
1.3 Highlands maize seed multiplication	Plant highlands maize for seed.	126 ha planted.	6 ha increase over previous year.
	Market highland maize seed.	900 kg seed was sold outside project area @ M30,00/20 kg.	

5 ENVIRONMENT (CONTINUED)

RURAL DEVELOPMENT SECTION (CONTINUED)

Programme	Activities	Progress	Remarks
2.0 Community Forestry	Secure project funding and nominate agent for implementing project.	EU has provided funding for four years. CARE Lesotho has been nominated to implement the project.	A four year implementation plan has been developed.
3.0 Animal Husbandry and Range Management	Establish HQ for Maliba-mat'so/Matsoku RMA.	Hq site identified and delineated. 50% developed.	
	Establish the Tsikoane RMA	Grazing Association constitution is being drafted.	
	Continue breeding programme for Pelaneng/Bokong and Maliba-mat'so/Matsoku RMAs.	Breeding stock worth M16 000 purchased on half basis between RMAs and project.	
Visitor Information and Tourism	Collaborate with LTB and MINTOUR in planning and developing tourism projects in LHWP.	Joint planning sessions were held. LHDA and LTB are co-funding development of the hiking trails.	More collaboration is planned, and LTB/MINTOUR to start planning taking over the facilities once they are operational.
Development of hotel industry	Issuance of the sub-leases in the leased LHWP area.	4th draft of the lease agreement was produced and awaiting approval.	Procure a Consultant to identify more sites. Same Consultant to plan these sites for suitability of investment. Advertise sites for development.
Development of adventure tourism	To plan and develop hiking trails, pony treks, rock climbing and boating.	Hiking trails were mapped and development plan produced. Rock climbing. Consultant identified. Conditions for accessing Katse Dam for boating being drafted.	Phase 1 of the hiking trails will be developed. Consultant will be engaged and several rock climbing routes developed. Conditions for accessing Katse Dam will be finalised and boating authorised.
Establishment of picnic sites and view points	To establish picnic sites; develop view points on Northern Access Road.	Consultant for hotel industry to plan the development of these projects as well.	Procure a Consultant.

NATURAL ENVIRONMENT AND HERITAGE SECTION

Programme	1996/97 Activity	1996/97 Achievement	1997/98 Target
PHASE 1A 1. Erosion and Sedimentation Contract 617 A & B	Soil loss and sediment yield modelling.	Study completed. Modelling completed.	Final Report submitted – June 1997 Phase 2 of the study awarded – March 1998.
2. Watershed Management	Implement soil erosion measures to protect croplands.	Work started. Labour hired to do work in 'Muela Hydropower site.	Continue work in 'Muela and Katse – April/97 to March 1998.
3. Water Quality	Short term agreement with Rand Water Board. Complete TOR for long term water quality monitoring. Water quality sampling from the reservoir and rivers.	Agreement signed. Rand Water Board assisted LHDA with water sampling and analysis from reservoir and rivers. TOR for long term water quality monitoring submitted to JPTC for approval. Sampling continued from the reservoir and rivers.	Merger of water quality and water resources – June. TOR for long term water quality monitoring finalised. Reservoir and rivers sampling.
4. Biological Resources Contract 615 (Biology Monitoring). Contract 645 (Botanical Garden Establishment at Katse).	Continue monitoring Award contract, produce building plans and tendering, contract garden buildings. Garden layout plan produced. Plant collection. Community liaison pitso's.	Consultant submitted progress reports. Consultancy awarded. Plants to the garden collected. Building plans completed and tenders received. Community liaison pitso's conducted.	Continue monitoring to March 1998. Continue plant collection to March 1998. Complete garden buildings by March 1998. Planting collected plants to March 1998. Continue conducting community liaison pitso's.
5. Heritage Resources – Contract 1016 Variation Orders for 'Muela Archaeological excavations and rescue.	Rescue archaeological artefacts, storage of artefacts. Purchase storage equipment or artefacts materials.	Rescue of materials done. Storage equipment purchased.	Complete excavations August 1998.
6. Nature Reserves Contract 604.	Board approval sought. Contract negotiation. Contract award. Implement Programme.	Board approval received. Contract negotiated. Contract implemented.	Consultant produces reserved plans – July '97. Nature reserve declared by March 1998. Implement Nature reserves plan by March 1998.
7. Natural Resources Advisory Committee Established.	Budget approval.	Budget approved.	TOR committee completed.

5 ENVIRONMENT (CONTINUED)

NATURAL ENVIRONMENT AND HERITAGE SECTION (CONTINUED)

Programme	1996/97 Activity	1996/97 Achievement	1997/98 Target
8. Environment Awareness	Community Awareness Pitso's. Herdboys consultations. Schools involvement in environmental awareness. Can recycling. Purchase of can crushing machines. Publish awareness materials. Produce environmental videos.	Pitso's conducted. Consultations with herdboys done. Schools involvement in environmental awareness done. Continued Can recycling. Can crushing machines purchased. Awareness materials distributed to communities.	Continue environmental awareness pitso's and consultations, schools and herdboys to March 1998. Publish awareness materials and videos production to March 1998.
PHASE 1B			
9. Instream Flow Requirements Study	Tendering. Award contract. Implement study.	Tenders invited.	Tender evaluation – June 1997. Award contract – July 1997. Implement study – August 1997 to March 1998.
10. Heritage Resources – Contract 1016.	Retrieve artefacts. Submit final report. Storage of artefacts.	Artefacts retrieved. Final report submitted. Purchased artefacts storage equipment.	Storage of artefacts – August 1997 - March 1998. Closure of contract – December 1997.
Contract 1039 – Paleontology	Award contract on reconnaissance survey.	Contract for reconnaissance survey awarded.	Continue Paleontology survey – July 1997 to March 1998.
11. Maloti Minnow Conservation (Contract 170)	Breeding minnow in captivity. Breeding stock translocation.	Breeding in captivity continued.	Continue breeding to December 1997.
12. Biology Survey and Reserve Development – Contract 1008	Continue execute study. Implement Monitoring Programme.	Study completed. Final report submitted to LHDA. Monitoring proposal included in Phase 1B EAP.	Tenders to monitoring invited – August 1997. Award contract March 1998 and implement study.
13. Environmental Action Plan	Prepare Phase 1B EAP. Discuss EAP with stakeholders.	First draft completed. Discussed EAP with stakeholders in workshops.	Complete draft final EAP for circulation to stakeholders. Finalise EAP.
14. Water Quality Monitoring	Continue to execute study. Complete study.	Study completed.	Produce final report – June 1997.
15. Geographical Information Systems Unit and Survey Unit	Data entry and analysis. Data presentation in maps. Train staff in GIS (hands-on training). Survey of LHDA sites. Survey compensation sites.	Data entry and retrieval for programmes needs. Data presented on maps. Proposed projects for GIS planned. Staff received training. Held seminars on GIS sites surveyed. Compensation sites surveyed.	Continue data entry and analysis. Continue data displays in maps. Implement projects. Continue to hold seminars. Continue to survey LHDA sites. Continue to survey compensation sites.

PUBLIC HEALTH

Public Health activities during the report period included Health Promotion and Disease Prevention; Health monitoring and Disease surveillance; and Clinical Services targeting the local communities and the construction workforce mainly for the Phase 1A. STDs, HIV and AIDS, immunisable diseases, nutritional disorders, acute respiratory infections, occupational health disorders and accidents remain the main problems affecting the local populations, especially the Severely Affected Persons (SAP's).

Plans and activities have begun in the Phase 1B to ensure that basic public health infrastructure is in place, particularly before the Stage 1 resettlement takes place – in collaboration with other LHDA divisions, the Mantsonyane Health Service Area and the Ministry of Health and Social Welfare (MOHSW).

As the ultimate responsibility for providing health care to the highland populations rests on the GOL, discussions took place to establish collaboration in provision of public health services in the project area.

The Public Health Terms (PHT's) have been fully integrated into the Field Operation Teams and continue to be core members. The process of recruitment of the Public Health members of the Mohale FOT will be finalised soon.

The Leribe Trauma Unit continued to provide essential emergency care services for both the construction workforce and the local communities.

Monitoring of industrial hygiene, occupational health and safety has continued. The LHDA Policy on industrial hygiene, occupational health and safety was approved by the relevant authorities and became operational in the implementation of various contracts in the Phase 1B and subsequent phases of the project.

BUTHA-BUTHE PUBLIC HEALTH TEAM

Through the 'Muela Enhancement Plan, LHDA has employed the Micro Project Management Unit (MMU) to undertake sanitation and other works in the Butha-Buthe local catchment. This proceeded well leaving the PHT to monitor the construction of these facilities and undertake other health promotion and disease control activities.

The year saw many industrial strikes by contractor employees which led to a disruption of a number of activities including those of the PHT's.

Due to an increasing demand from local communities for sanitary facilities and the perceived prevailing poverty, the team embarked on the material support programme for latrine construction in selected villages where individual householders purchase latrine kits and the team supports with the rest of the building materials and payment of latrine builders. Four villages were assisted with constructions.

IMMUNISATION

The team assists with immunisations at the local health centres during clinic days and maintains records.

HEALTH EDUCATION

Regular sessions with small groups of five to ten people were held with the workforce. Emphasis here was on family life education, sexually transmitted diseases, and tuberculosis.

Regular sessions were also held with expectant and breastfeeding mothers during clinic days at the local health centres. Emphasis here was on ante and post natal care, STDs, and personal hygiene.

SYPHILIS TESTING

152 cases were tested and counselled, of which 36 tested positive. 31 of the positives were expectant mothers and the rest workforce. All 36 were given contact forms and some of their partners turned up for treatment.

5 ENVIRONMENT (CONTINUED)

SCHOOL HEALTH

This activity was negatively affected by the teachers' strike. No screening was conducted and only three of the eight schools were visited for health education.

STAFF DEVELOPMENT AND WORKSHOPS

All the three team members had a chance to attend the internal one week computer familiarisation course. Although too short, the course has been beneficial to the team as they are now able to prepare their own documentation. All the team members have expressed the desire to pursue an advanced course. One attended a one week STDs course in South Africa and a three week syphilis testing course in Maseru.

LERIBE TRAUMA UNIT

The LTU remains the only specialised trauma centre with an Intensive Care Unit in Lesotho. It treated severe trauma emergencies from the project sites, road traffic accidents and any medical emergencies from LHWP and the local communities.



6 HUMAN RESOURCES

PERSONNEL

Division	Locals	Expatriates	Total
Executive	15	1	16
Internal Audit	2	1	3
Treasury	29	3	32
Environment	111	7	118
Administration	37	-	37
Finance	27	3	30
Legal	8	1	9
Human Resources	14	1	15
Construction	31	4	35
Planning & Design	82	2	84
Public Relations	20	-	20
Operations & Maintenance	33	1	34
Infrastructure	7	1	8
Water Resources	11	1	12
Information Systems	13	1	14
TOTAL			467

TRAINING

Five Engineering students completed their degrees in the UK.

- 1 BSc Civil Engineering
- 3 MSc Civil Engineering
- 1 PhD Electrical Engineering

Employees have been absorbed into positions in the Engineering Department and in some cases have been seconded to Consultants on the Mohale Dam and Tunnel.

7 PROJECT FINANCING

A. WATER TRANSFER 1A

As the completion of the Phase 1A draws near, the drawdown period of the original export credit facilities is also coming close to expiration. The export credit facilities raised for the financing of the additional tunnel lining only became effective at the end of December, 1996. The re-imbursement process for the CMA facilities that were used as bridging finance had been initiated by the end of the financial year.

Two new LHWP stocks were issued in November (WS02 a five year stock and WS03 a 14 year stock) bringing the total LHWP stock to M2.845 billion and the LHDA portion to M2.002 billion.

B. HYDROPOWER

The export credit facilities raised for the financing of Underground Power Facilities at 'Muela (LHDA Contract 129A) only became effective during December 1996. Re-imbursement claims have been submitted to the offshore banks and it is expected that the Lesotho Bank stand-by facility of M200 million will be reduced to approximately M40 million as soon as the re-imbursement funds are received.

Negotiations for funding of the 'Muela Station Bypass could not be pursued before the export credit for Contract 129A became effective. The process has now been initiated and in the meantime funding will be bridged out of CMA facilities.

Financing arrangements for the National Control Centre Scada were concluded with Skandinaviska Enskilda Banken of Sweden, for the provision of an export credit loan for M34 million equivalent.

Funding totalling M3 million was raised from the European Union and the Development Bank of Southern Africa for the 'Muela Reinstatement and Enhancement Project. The purpose of the project is to provide basic infrastructural, sanitation and recreational facilities around the 'Muela Hydro Station. It is anticipated that some of these facilities will help boost the tourism potential of that area.

An exercise to re-appraise the financial viability of 'Muela commenced during the year and will be concluded around June 1997. Some of the early recommendations emerging from the study are that 'Muela's financial viability could be greatly enhanced by a review of the debt/equity structure.

Appropriate recommendations will be made to Lesotho Government to achieve this objective.

PHASE 1B

A three pronged approach is being pursued by LHDA in mobilising funding required for the construction of Phase 1B, and this process has culminated in the preparation of three sets of financing strategies as detailed below:

– FOREIGN FINANCING STRATEGY

Deutsche Morgan Grenfell, as appointed financial advisors, assisted in preparing the strategy, the thrust of which is to raise export credit finance from sources similar to where contractors will be recruited. In this connection contractors will be requested to submit bids with accompanying financing offers. The foreign finance being raised under this strategy is for Mohale Dam and Tunnel only.

– CMA FINANCING STRATEGY

As nearly 60% of the project costs are expected to be denominated in the CMA currencies, a strategy has been prepared identifying various services of finance which include:

- CMA Commercial and Capital Market facilities
- RSA Own Resources (Water levies)
- Development Bank of Southern Africa

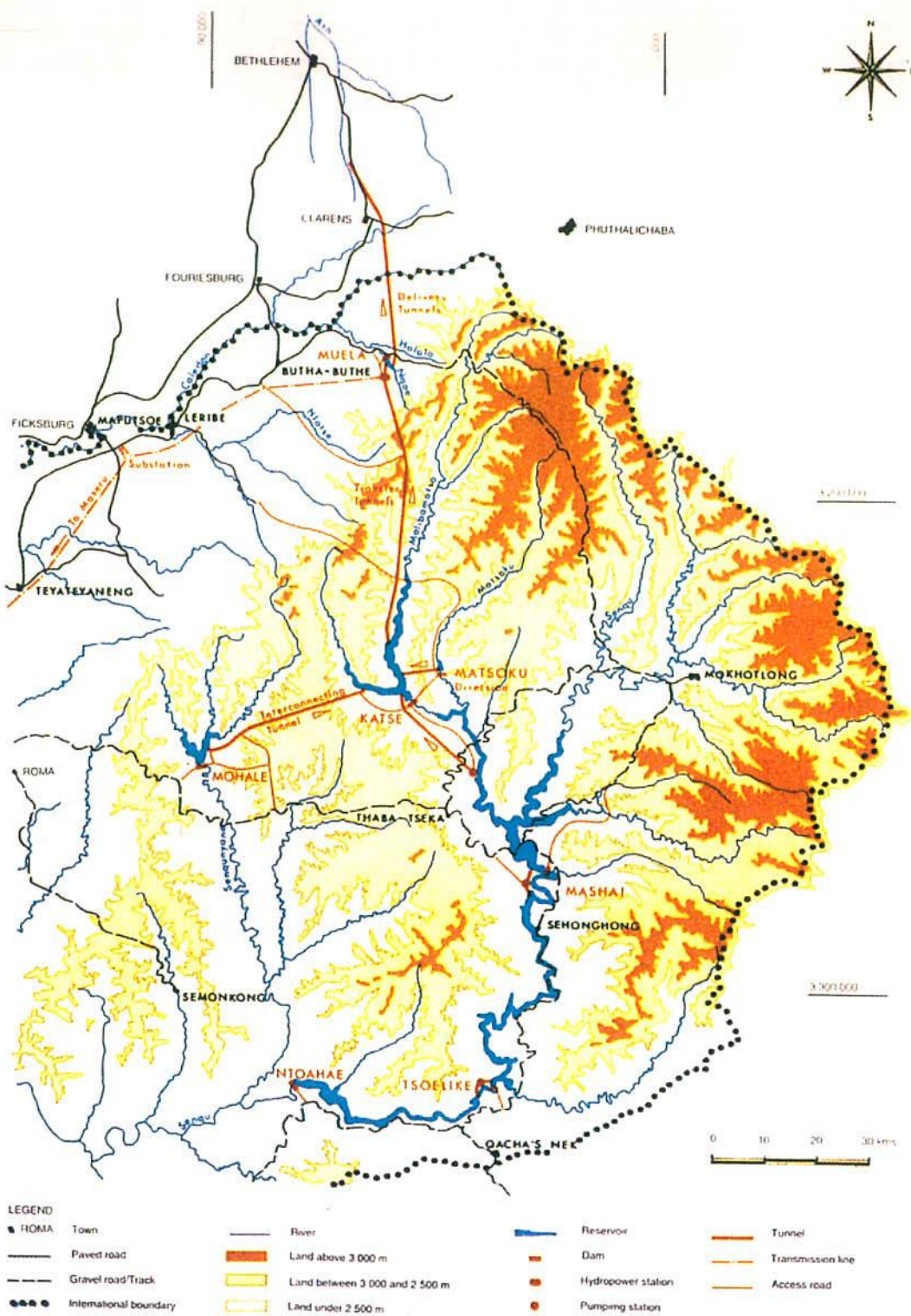
– CONCESSIONARY SOURCES OF FUNDING

Various international financing institutions have been approached to support elements of the project related to environment and social development. As the projects are currently being identified, no firm financing offers have been received yet.

The World Bank is expected to continue to play a pivotal role in its support for the project. Apart from providing a loan for USD45 million for technical assistance, the Bank will assume its usual role of supervising the project to ensure compliance with international standards.

The European Investment Bank has been invited to provide funding through their concessional "Own Resources" window for the Matsoku Diversion Works.

LAYOUT OF THE PROJECT



FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 1997

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DIRECTORS' APPROVAL

The financial statements which appear on pages 32 to 48 were approved by the Board of Directors on 30 June 1997 and are signed on its behalf by:



HM Mhlanga
CHAIRMAN



M Marumo
CHIEF EXECUTIVE

REPORT OF THE INDEPENDENT AUDITORS TO THE MEMBERS OF THE BOARD OF THE LESOTHO HIGHLANDS DEVELOPMENT AUTHORITY

We have audited the annual financial statements set out on pages 32 to 48.

RESPECTIVE RESPONSIBILITIES OF DIRECTORS AND AUDITORS

These financial statements are the responsibility of the Authority's directors. Our responsibility is to report on these financial statements.

BASIS OF OPINION

We conducted our audit in accordance with generally accepted auditing standards. These standards require that we plan and perform the audit to obtain reasonable assurance that, in all material respects, fair presentation is achieved in the financial statements. The audit included an evaluation of the appropriateness of the accounting policies, and examination, on a test basis, of evidence that supports the amounts included in the financial statements, an assessment of the reasonableness of significant estimates and a consideration of the appropriateness of the overall financial statements presentation. We consider that our audit procedures were appropriate to enable us to express our opinion presented below.

OPINION

To the best of our knowledge and belief and on information supplied to us, the financial statements reflect a true statement of the assets and liabilities of the Authority at 31 March 1997.

DELOITTE & TOUCHE
CHARTERED ACCOUNTANTS (Lesotho)
30 June 1997

STATEMENT OF ACTIVITIES AND ACCOUNTING POLICIES FOR THE YEAR ENDED 31 MARCH 1997

1 STATEMENT OF ACTIVITIES

The Authority is entrusted with the responsibility for the implementation, operation and maintenance of the Lesotho Highlands Water Project as defined in the Treaty on the Lesotho Highlands Water Project signed by the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa on 24 October 1986.

The Authority is also conferred with general functions in relation to water resources, electricity, education and training of its employees, monitoring activities and land transactions.

The Authority is presently engaged upon construction of Phase IA and the planning and construction for Phase IB of the Lesotho Highlands Water Project. At this time progress on Phase IA is satisfactory and the Authority envisages completion in 1998. The principal physical features of Phase IA in Lesotho are:

- a) A 182 m high concrete arch dam on the Malibamats'o River at Katse.
- b) A 45 km transfer tunnel north from the Katse reservoir to the Hydropower complex at 'Muela.
- c) A 72 MW underground Hydropower complex at 'Muela.
- d) A 17 km delivery tunnel north from 'Muela to the Mohokare (Caledon) River, which forms the border between the Kingdom of Lesotho and the Republic of South Africa. This tunnel will link up through an underground syphon at this location with the South African portion of the transfer tunnel system.
- e) Associated infrastructure, including construction of new roads, upgrading and rehabilitation of existing roads, three major road bridges, upgrading of border crossing facilities and new river crossings, camps, communications, power supply, communication systems, etc.
- f) Associated conservation, environmental and rural development activities.

The principal physical features of Phase IB are:

- a) The 146 m high Mohale Dam.
- b) A 30 km transfer tunnel from the Mohale intake to the Katse reservoir.
- c) The Matsoku Weir and a six kilometre diversion tunnel from the weir to the Katse Reservoir.
- d) Associated infrastructure, including construction of new roads, upgrading and rehabilitation of existing roads, camps, communications and power supplies.
- e) Associated conservation, environmental and rural development activities.

2 PRINCIPAL ACCOUNTING POLICIES

The financial statements are prepared on the historical cost basis and incorporate the following principal accounting policies:

2.1 CAPITAL WORK-IN-PROGRESS

Costs incurred on the implementation of the Lesotho Highlands Water Project, including costs incurred prior to the establishment of the Authority on 24 October 1986, are capitalised and shown as fixed assets on the Balance Sheet of the Authority. As construction will not be completed before 31 March 1997, no depreciation is charged.

Costs comprise all attributable costs of bringing the asset or group of assets to working condition for their intended use, and include inter alia:

- a) all costs of investigations, surveys, feasibility studies, engineering studies, preparation of designs, construction, construction supervision, procurement and commissioning;
- b) the establishment and administration costs of the Authority;
- c) the costs of any land or interest in land, and any improvements to such lands;
- d) the costs of measures taken, in order to ensure that members of local communities in Lesotho are not adversely affected by Project-related activities, including the cost of providing compensation;



STATEMENT OF ACTIVITIES AND ACCOUNTING POLICIES FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

2 PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

- e) all finance charges (including interest payments, financing and foreign exchange cover charges and other charges) relating to finance raised to fund capital expenditure.

All costs incurred are apportioned to one or more of the following activities:

- i) generation of hydro-electric power in the Kingdom of Lesotho ("Hydropower")
- ii) delivery of water to South Africa ("Water Transfer")
- iii) ancillary developments in the Kingdom of Lesotho ("Ancillary Developments")

The Government of the Kingdom of Lesotho is, by way of Cost Related Payments, responsible for the costs of the Hydropower and Ancillary Development activities. The Government of the Republic of South Africa is, by way of Cost Related Payments, responsible for the costs of the Water Transfer activities.

2.2 INVESTMENTS

Investments are stated at market value.

2.3 FOREIGN CURRENCIES

Assets and liabilities in foreign currencies are translated to Maloti at rates of exchange ruling at the end of the financial year or, where applicable, at forward cover rates.

Transactions in foreign currencies are translated to Maloti at rates of exchange ruling at the date of the transaction or, where appropriate, at forward cover rates.

Premiums on forward exchange contracts are amortised over the period of the contract.

Under the terms of the Treaty covering the project and the Ancillary Agreement to the Treaty of 13 November 1991, the Government of the Republic of South Africa is obligated to effect debt service payments on all loans guaranteed by it.

The forward cover contracts have been effected by the Government of the Republic of South Africa.

Exchange differences are allocated to the cost of the related activities.

2.4 COST RELATED PAYMENTS

Cost Related Payments from the Governments of Lesotho and South Africa are recognised and credited to the Capital Fund on the date due for payment.

Cost Related Payments become due when the relevant cost falls due for payment; provided that Cost Related Payments may be paid directly to contractors or consultants, or, where costs have been financed by way of loans, shall be due for payment at the time such loans become redeemable.

Funds obtained on concessionary terms for the Water Transfer component are, for the purpose of Cost Related Payments, deemed to be loans at the interest rate and redemption terms applicable to loans of the International Bank for Reconstruction and Development.

2.5 ROYALTIES

Royalties arising from the Lesotho Highlands Water Project, including advance royalty payments through the Southern Africa Customs Union, accrue to the Government of Lesotho and are therefore not reflected in the financial statements of the Authority.

2.6 OTHER INCOME

Other income arising, such as interest earned, exchange gains and miscellaneous income, is credited to the cost of the activity to which it relates.

2.7 FUNDS FROM CAPITAL MARKET

The LHDA utilises the South African Capital Market purely for the raising of finance for the Lesotho Highlands Water Project and does not trade in bonds once they have been issued.

The finance raised through the Capital Markets is therefore treated as long term funding and interest not serviced through the semi-annual coupon payments is capitalised into the bond account.

Capital Market Options outstanding at the year end are detailed in the notes to the financial statements and not brought to account until exercised.

BALANCE SHEET AT 31 MARCH 1997

		1997	1996
	Notes	M'000	M'000
ASSETS EMPLOYED			
FIXED ASSETS	1	8 140 739	6 080 745
INVESTMENT	2	16 334	15 334
		<u>8 157 073</u>	<u>6 096 079</u>
CURRENT ASSETS			
Advance Payments		36 360	80 726
Other Debtors and Prepayments		138 632	95 922
Cash and Bank		45 201	35 411
		<u>220 193</u>	<u>212 059</u>
CURRENT LIABILITIES			
Contracts, Payables and Accruals		554 835	238 657
Retentions		111 256	96 799
Other Payables and Accruals		164 528	111 067
Current Portion of Long Term Liabilities	6	418 078	45 885
		<u>1 248 697</u>	<u>492 408</u>
NET CURRENT LIABILITIES	9	<u>(1 028 504)</u>	<u>(280 349)</u>
		<u>7 128 569</u>	<u>5 815 730</u>
FINANCED BY:			
CAPITAL FUND	3	1 793 708	1 295 772
GOVERNMENT OF LESOTHO FUND	4	56 807	64 051
GOVERNMENT OF SOUTH AFRICA FUND	5	2 273	2 652
LONG TERM LIABILITIES	6	3 533 124	3 044 710
FUNDS FROM CAPITAL MARKET	7	1 742 657	1 408 545
		<u>7 128 569</u>	<u>5 815 730</u>

STATEMENT OF CHANGES IN FINANCIAL POSITION FOR THE YEAR ENDED 31 MARCH 1997

SOURCE OF FUNDS

	1997 M'000	1996 M'000
Government of Lesotho	49 142	27 468
Government of Republic of South Africa	435 754	261 770
Net Increase in Long Term Liabilities	488 414	410 649
Increase in Net Current Liabilities	748 155	18 131
Funds from Capital Market	404 003	724 016
Net proceeds from redemption of Zero Coupon Bonds	722	-
	2 126 190	1 442 034

USES OF FUNDS

Expenditure on Capital Work in Progress

Administration	104 787	80 775
Construction	1 033 429	714 929
Engineering	134 363	98 233
Environment	72 667	44 085
Financing	780 944	504 012
	2 126 190	1 442 034

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 1997

1 FIXED ASSETS

CAPITAL WORK IN PROGRESS

PHASE 1A *Hydropower*

Balance 1/4/96 M'000	Increase During Year M'000	Balance 31/3/97 M'000
Administration	34 184	9 911
Construction	221 156	147 223
Engineering	88 103	23 952
Environmental	4 010	661
Financing	3 002	1 111
	<u>350 455</u>	<u>182 858</u>
		<u>533 313</u>

Ancillary Developments

Administration	11 084	1 585	12 669
Construction	86 514	—	86 514
Engineering	7 986	42	8 028
Environmental	17 060	4 532	21 592
Financing	2 814	2 129	4 943
	<u>125 458</u>	<u>8 288</u>	<u>133 746</u>

Water Transfer

Administration	380 630	69 280	449 910
Construction	3 083 606	694 787	3 778 393
Engineering	429 126	69 629	498 755
Environmental	81 938	50 737	132 675
Financing	1 504 630	711 498	2 216 128
	<u>5 479 930</u>	<u>1 595 931</u>	<u>7 075 861</u>

PHASE 1B *Water Transfer*

Administration	13 418	24 011	37 429
Construction	85 363	191 419	276 782
Engineering	18 128	40 740	58 868
Environmental	7 993	16 747	24 740
	<u>124 902</u>	<u>272 917</u>	<u>397 819</u>

Total Fixed Assets	<u>6 080 745</u>	<u>2 059 994</u>	<u>8 140 739</u>
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NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

1 FIXED ASSETS (CONTINUED)

- i) Included in financing of Phase 1A Fixed Assets is M64 507 760 representing the finance costs attributable to funds obtained on concessionary terms of the Water Transfer Component, deemed to be loans with interest rates and redemption terms applicable to loans of the International Bank for Reconstruction and Development.
- ii) Phase 1B costs to date relate wholly to water transfer and are a Republic of South Africa cost responsibility.

The above allocation of costs between Hydropower, Ancillary Developments and Water Transfer is subject to agreement by the parties to the Treaty.

2 INVESTMENT

The Authority holds zero coupon United States Treasury Bonds, at a cost of US\$3 681 654. The Bonds mature between August 1997 and February 2009, at a value of US\$6 872 000.

The bonds were purchased to provide security for a loan, obtained from the European Investment Bank, to finance the 'Muela Hydropower component of the Project, per note 6 (vi).

3 CAPITAL FUND

	Government of Lesotho M'000	Government of South Africa M'000	Total M'000
Balance at 1 April 1996	265 961	1 029 811	1 295 772
Cost Related Payments:			
Hydropower and Ancillary Development	61 803	-	61 803
Water Transfer	-	436 133	436 133
Balance at 31 March 1997	<u>327 764</u>	<u>1 465 944</u>	<u>1 793 708</u>

Total Water Transfer costs at 31 March 1997 amount to M7 473 680 000 of which M1 465 944 000 has been paid as shown above.

The balance of M6 007 736 000 will be discharged through future cost related payments.

Total Hydropower and Ancillary Development costs at 31 March 1997 amount to M667 059 000 of which M327 764 000 has been paid as shown above.

The balance of M339 295 000 will be discharged through future cost related payments.

4 GOVERNMENT OF LESOTHO FUND

	1997 M'000	1996 M'000
Balance at beginning of year	64 051	111 050
Reversal of prior year transfers	–	1 585
Amounts provided by Government of Lesotho	60 924	48 483
Transfer to Long Term Liabilities	–	(14 807)
Net Financing Income Accrued	5 417	5 931
Cost Related Payment paid to Government of South Africa	379	757
Cost Related Payment received from Government of South Africa	(12 161)	(16 046)
Cost Apportionment amount received	–	(5 626)
Cost Related Payments on Hydropower and Ancillary Developments transferred to Capital Fund	(61 803)	(67 276)
Balance at end of year	<u>56 807</u>	<u>64 051</u>

This Balance comprises:

Funding of Water Transfer Costs	28 610
Concessionary Finance Income	<u>28 197</u>
	<u>56 807</u>

These sums will be discharged by future Cost Related Payments by the Government of South Africa.

The total amount provided by the Government of Lesotho during the period is analysed by original source as follows:

ANALYSIS OF FUNDS PROVIDED BY THE GOVERNMENT OF LESOTHO

	Balance 1 April 1996 M'000	Increase During Year M'000	Balance 31 March 1997 M'000
European Development Fund	123 591	31 283	154 874
European Investment Bank	8 793	–	8 793
Government of France	70 723	–	70 723
Government of Lesotho	36 505	27 375	63 880
International Development Association	25 311	–	25 311
Overseas Development Administration	24 122	2 048	26 170
United Nations Development Programme	2 664	–	2 664
U.S.A.I.D.	612	–	612
Centre for International Migration	764	–	764
Government of Ireland	375	–	375
Svenska Handelsbanken	27 113	218	27 331
	<u>320 573</u>	<u>60 924</u>	<u>381 497</u>

The terms and conditions on which these amounts have been provided have not as yet been determined.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

5 GOVERNMENT OF SOUTH AFRICA FUND

	1997 M'000	1996 M'000
Balance at start of year	2 652	3 408
Cost related payments during the year on water transfer paid to:		
- Government of Lesotho	12 161	16 046
- Third Parties	423 972	246 481
Cost related payment received from Government of Lesotho	(379)	(757)
Cost related payments on water transfer transferred to Capital Fund	(436 133)	(262 526)
Balance at end of year	<u>2 273</u>	<u>2 652</u>

This balance comprises funds contributed for Hydropower and Ancillary Developments and will be discharged by future cost related payments by the Government of Lesotho.

6 LONG TERM LIABILITIES

FACILITIES FOR WHICH FOREIGN EXCHANGE FORWARD COVER CONTRACTS HAVE BEEN EFFECTED

- i) *Facilities specific to Katse Dam and appurtenant works, Transfer Tunnels and Delivery Tunnel South.*

BANQUE NATIONALE DE PARIS

Export Credit Loans

a) Katse Dam	115 279	88 265
b) Transfer Tunnels	303 252	227 361
c) Delivery Tunnel South	78 556	75 473

Commercial Loans

d) Katse Dam	21 116	21 116
e) Transfer Tunnel	32 508	32 508
f) Delivery Tunnel South	15 353	15 353

CREDIT LYONNAIS

Export Credit Loan

g) Katse Dam	345 106	279 864
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Commercial Loan

h) Katse Dam	57 483	57 483
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6 LONG TERM LIABILITIES (CONTINUED)

	1997 M'000	1996 M'000
DRESDNER BANK AG		
<i>Export Credit Loans</i>		
i) Katse Dam	113 767	84 753
j) Transfer Tunnels	233 596	171 326
k) Delivery Tunnel South	63 239	57 938
DRESDNER BANK LUXEMBOURG SA		
<i>Commercial Loans</i>		
l) Katse Dam	14 406	14 406
m) Transfer Tunnels	21 286	21 286
n) Delivery Tunnel South	10 058	10 058
HILL SAMUEL BANK LIMITED		
o) Export Credit Loan	345 499	287 028
p) Commercial Loan	55 525	55 525
The above loans are multi-contract and relate to Katse Dam, Transfer Tunnels and Delivery Tunnel South.		
KREDITANSTALT FUR WIEDERAUFBAU (KFW)		
<i>Export Credit Loans</i>		
q) Katse Dam	58 194	42 785
r) Transfer Tunnels	119 859	86 231
s) Delivery Tunnel South	32 033	28 973
<i>Commercial Loans</i>		
t) Katse Dam	7 203	7 203
u) Transfer Tunnels	10 644	10 644
v) Delivery Tunnel South	5 029	5 028
COMMONWEALTH DEVELOPMENT CORPORATION		
w) Commercial Loan	125 850	125 850
The above loan is multi-contract and relates to Katse Dam, Transfer Tunnels and Delivery Tunnel South.		
ii) <i>Facility specific to provision of communication systems to the project</i>		
COMMONWEALTH DEVELOPMENT CORPORATION		
Commercial Loan	20 051	22 005

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

6 LONG TERM LIABILITIES (CONTINUED)

FACILITY FOR WHICH CONTRACTS FOR PARTIAL FOREIGN EXCHANGE FORWARD COVER HAVE BEEN EFFECTED

1997 M'000	1996 M'000
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iii) *Facility specific to provision of consultancy, training and project preparation.*

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

World Bank Loan	247 222	363 103
	<u>2 452 114</u>	<u>2 191 565</u>
Less provision for unamortised cost of forward cover	377 889	435 929
	<u>2 074 225</u>	<u>1 755 636</u>

FACILITIES FOR WHICH FOREIGN EXCHANGE FORWARD COVER CONTRACTS HAVE NOT BEEN EFFECTED

iv) *Facilities for provision of Infrastructure and Institutional Support*

DEVELOPMENT BANK OF SOUTHERN AFRICA

In respect of

a) Southern Access Road	21 949	21 625
b) Northern Access Road, Northern Portion	150 198	147 044
c) Katse Bridge	2 305	2 271
d) Northern Access Road, Southern Portion	54 055	53 104
e) Border Crossing Facilities	8 094	7 779
f) Infrastructure Management	190	211
g) North End Access Road	42 510	41 617
h) Katse Village Engineering Works	26 111	24 949
i) Communication System	1 028	1 109
j) Butha-Buthe Engineering Supervision Compensation	18 392	17 558
k) Civil Construction Training Needs Preparation Costs and Accommodation	676	676
l) Civil Construction Training Needs Establishment Cost	143	152
m) Accounting Systems Computerisation	2 623	2 760
n) Upgrading existing roads	31 556	31 453
o) RDP Feeder Roads and Reservoir Crossings	66 977	4 899
p) RDP Construction Communities	1 037	967

6 LONG TERM LIABILITIES (CONTINUED)

	1997 M'000	1996 M'000
<i>v) Facilities for overall project implementation</i>		
(a) CMA III FACILITY – STANDARD BANK/FIRST NATIONAL BANK	–	1 715
(b) CMA IV FACILITY – ABSA/FIRST CORP	1 195 663	815 832
<i>vi) Facilities for 'Muela Hydropower implementation</i>		
(a) European Investment Bank	24 845	22 430
(b) West Merchant Bank	753	647
(c) Development Bank of Southern Africa	31 161	22 601
(d) Svenska Handelsbanken	19 094	19 339
(e) Lesotho Bank	110 406	55 443
(f) Government of Lesotho	52 248	23 912
(g) Government of Lesotho (Development Fund)	14 963	14 866
	<u>3 951 202</u>	<u>3 090 595</u>
Less: Current Portion	<u>418 078</u>	<u>45 885</u>
	<u>3 533 124</u>	<u>3 044 710</u>

i) Facilities specific to Katse Dam and appurtenant works, Transfer Tunnels and Delivery Tunnel South.

(Refer to pages 40 – 41)

- | | |
|---|--|
| <p>a) Repayable in 20 semi-annual instalments commencing at the earlier of six months after the date of delivery of the provisional acceptance certificate or 31 July 1997, and bearing interest at fixed rates.</p> <p>b) Repayable in 20 semi-annual instalments commencing at the earlier of six months after the date of delivery of the provisional acceptance certificate or 31 July 1997, and bearing interest at fixed rates.</p> | <p>c) Repayable in 20 semi-annual instalments commencing at the earlier of six months after the date of delivery of the provisional acceptance certificate or 31 July 1997, and bearing interest at fixed rates.</p> <p>d) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.</p> <p>e) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.</p> <p>f) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.</p> <p>g) Repayable in 20 semi-annual instalments commencing at the earlier of six months after substantial completion or 31 July 1997 and bearing interest at fixed and varying rates.</p> |
|---|--|

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

6 LONG TERM LIABILITIES (CONTINUED)

- h) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - i) Repayable in 20 semi-annual instalments commencing at the earlier of six months after date of substantial completion of contract or 31 July 1997, and bearing interest at a varying rate.
 - j) Repayable in 20 semi-annual instalments commencing at the earlier of six months after date of substantial completion of contract or 31 July 1998, and bearing interest at a varying rate.
 - k) Repayable in 20 semi-annual instalments commencing at the earlier of six months after date of substantial completion of contract or 31 July 1997, and bearing interest at a varying rate.
 - l) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - m) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - n) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - o) Repayable in 20 semi-annual instalments commencing at the earlier of six months after commissioning or 31 July 1997, and bearing interest at a fixed rate.
 - p) Repayable in one instalment on the last business day in June 1997 and bearing interest at a varying rate.
 - q) Repayable in 20 semi-annual instalments commencing at the earlier of six months after substantial completion or 31 July 1997, and bearing interest at a fixed rate.
 - r) Repayable in 20 semi-annual instalments commencing at the earlier of six months after substantial completion or 31 July 1997, and bearing interest at a fixed rate.
 - s) Repayable in 20 semi-annual instalments commencing at the earlier of six months after substantial completion or 31 July 1997, and bearing interest at a fixed rate.
 - t) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - u) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - v) Repayable in one instalment on 30 June 1997 and bearing interest at a varying rate.
 - w) Repayable in 28 semi-annual instalments commencing on 30 January 1998 and bearing interest at a varying rate.
- ii) Facility specific to provision of communication systems to the project.*
- (Refer to page 41)
- Repayable in eight semi-annual instalments commencing on 31 January 1997 and bearing interest at a fixed rate.
- iii) Facility specific to provision of consultancy, training and project preparation.*
- (Refer to page 42)
- Repayable in 24 semi-annual and increasing instalments commencing on 1 November 1997 and bearing interest at a varying rate.
- iv) Facilities for provision of Infrastructure and Institutional Support*
- (Refer to page 42)
- a) Repayable over 20 years commencing 31 March 1993 and bearing interest at 8% p.a.
 - b) Repayable over 22.5 years commencing 30 September 1991 and bearing interest at 8% p.a.
 - c) Repayable over 20 years commencing 31 March 1991 and bearing interest at 8% p.a.
 - d) Repayable over 20 years commencing 30 September 1992 and bearing interest at 8% p.a.
 - e) Repayable over 20 years commencing 30 September 1992 and bearing interest at 11% p.a.

6 LONG TERM LIABILITIES (CONTINUED)

- f) Repayable over 10 years commencing 30 September 1993 and bearing interest at 4% p.a.
- g) Repayable over 20 years commencing 31 March 1993 and bearing interest at 8% p.a.
- h) Repayable over 20 years commencing 30 September 1993 and bearing interest at 12% p.a.
- i) Repayable over 10 years commencing 30 September 1993 and bearing interest at 4% p.a.
- j) Repayable over 20 years commencing 31 March 1994 and bearing interest at 12% p.a.
- k) Repayable over 13 years commencing 31 March 1993 and bearing interest at 8% p.a.
- l) Repayable over 10 years commencing 31 March 1993 and bearing interest at 4% p.a.
- m) Repayable over 10 years commencing 31 March 1993 and bearing interest at 4% p.a.
- n) Repayable over 15 years commencing 31 March 1996 and bearing interest at 6% p.a.
- o) Repayable over 6 years commencing 30 September 2000 and bearing interest at 7% p.a.
- p) Repayable over 16 years commencing 31 March 2000 and bearing interest at 7% p.a.

v) Facilities for Overall Project Implementation

(Refer to page 43)

- a) The CMA III facility will be reduced in ten equal annual instalments commencing on the earlier of the first anniversary of completion of Phase 1A of the project or 1 July 1997, and bears interest at varying commercial rates.
- b) The CMA IV facility will be reduced in 20 annual instalments commencing on the earlier of the six months after completion of Phase 1A of the project or 1 July 1997, and bearing interest at varying commercial rates.

All of the above loans are guaranteed by the Government of South Africa.

vi) Facility for 'Muela Hydropower Implementation

(Refer to page 43)

- a) Repayable over 10 years commencing 20 August 1999 and bearing interest at 3% p.a. This facility is secured as stated in note 2.
- b) Repayable in 20 semi-annual instalments commencing 15 December 1997 and bearing interest at 6.85%. This facility is guaranteed by the Government of Lesotho.
- c) Repayable over 17 years commencing 30 September 1998 and bearing interest at 13% p.a. This facility is guaranteed by the Government of Lesotho.
- d) Repayable in 20 semi-annual instalments commencing 15 December 1997 and bearing interest at 8.035% p.a.
- e) Repayable in full on 16 December 1999 and bearing interest at the lower of Central Bank of Lesotho call rate plus 7% or prime rate. This facility is guaranteed by the Government of Lesotho.
- f) Repayable in 10 annual instalments commencing 30 June 2004, and bearing interest at 9.8%.
- g) Repayable to the Government of Lesotho Development Fund. The repayment terms have not yet been determined.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

7 FUNDS FROM CAPITAL MARKET

During 1993/94 the Authority initiated the issue of capital market bonds and upon its instructions, Trans Caledon Tunnel Authority (TCTA), as the issuer, issued on LHDA's behalf together with a portion on its own behalf, bonds "in association", the proceeds of which were to be utilised partly by each party. The registered nominal value of the stock is R5 000 million which is guaranteed by the Government of South Africa. The bonds carry a coupon of 12% p.a., payable semi-annually in arrears, and are repayable on 1 December 2005, by the issuer.

During 1996/97 a further two issues of Lesotho Highlands Water Project capital market bonds were made by the Authority "in association" with the TCTA (LHWP) stock issues WS02 and WS03. The registered nominal values of these two further capital market bond issues are R3 000 million and R8 000 million respectively and are also guaranteed by the Government of South Africa. The WS02 bonds carry a coupon of 12.5% p.a. payable semi-annually in arrears and are repayable on 15 April 2002 whereas the WS03 bonds carry a coupon of 13% p.a. payable semi-annually in arrears and are repayable on 15 September 2010.

The nominal values and proceeds received from these issues are detailed below:-

NOMINAL VALUE OF LHWP STOCK ISSUED

	Total Value M'000	LHDA Issues M'000	TCTA Issues M'000
LHWP WS01 Stock	2 235 000	1 691 558	543 442
LHWP WS02 Stock	345 000	30 000	315 000
LHWP WS03 Stock	380 000	330 000	50 000
	<u>2 960 000</u>	<u>2 051 558</u>	<u>908 442</u>
Total		56 700	
less strategic portfolio		<u>1 994 858</u>	

NET PROCEEDS FROM LHWP STOCK ISSUED INCLUSIVE OF CAPITALISED FINANCE COST

	Total Proceeds M'000	Received by LHDA M'000	Received by TCTA M'000
LHWP WS01 Stock	2 003 708	1 524 755	478 953
LHWP WS02 Stock	298 166	27 641	270 525
LHWP WS03 Stock	326 202	235 835	90 367
	<u>2 628 076</u>	<u>1 788 231</u>	<u>839 845</u>
Total		45 574	
less strategic portfolio		<u>1 742 657</u>	

7 FUNDS FROM CAPITAL MARKET (CONTINUED)

Strategic Portfolio

In order to minimise the overall cost for funding through the capital markets, the proceeds from these initial launch issues were used to purchase R153 stock as part of a hedging exercise. By the year end a major portion of this strategic portfolio had been sold back into the market and the remaining R153 stock is reflected in this account at 31 March 1997 at a cost of R45.6 million and a nominal value of R56.7 million.

Option Premium Income

Options for LHWP stock have been bought and sold during the current year by the Authority as part of the overall funding strategy for the project and in order to hedge the cost of funding through the issue of capital market stock. A net premium income of R4.5 million was earned by the Authority during the current year from these funding operations. This income will be retained as a "hedging fund" and used for purchasing options in the future as part of the hedging strategy.

As at 31 March 1997 options to purchase bonds of nominal value M140 million and to sell bonds of nominal value M50 million were outstanding. These are sold or purchased to manage the interest rate payable on the capital market issue and not as a hedging instrument.

On 2 May 1997 options of nominal value M100 million were exercised, leaving the other M90 million to lapse. These options resulted in net proceeds from the underlying bonds of M90 969 610.

8 FORWARD COVER

All foreign currency denominated loans, except that of the European Investment Bank, Svenska Handelsbanken and West Merchant Bank, are the subject of forward cover.

9 CAPITAL COMMITMENTS

Outstanding capital expenditure contracted for at 31 March 1997 amounted to M1 383 million. Finance has been secured as at 31 March 1997 to meet all of these commitments, including current liabilities.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 1997 (CONTINUED)

10 CONTINGENT LIABILITIES

The Authority has been notified of the intention of various contractors to submit claims for additional costs, currently estimated by them at M196.73 million, arising from legislative changes in Lesotho, relating to taxation and employment practice.

The Authority is of the opinion that the results of ongoing discussions and representations are likely to substantially set aside such claims.

There is also a legal claim from a mining company of M81 million in the courts of Lesotho. The Authority is of the opinion that the chances of this company winning the case are very slim.

11 TAXATION

In accordance with Section 29(1) of the Lesotho Highlands Development Authority Order (No.23) of 1986, the Authority is exempt from sales tax payable under the Sales Tax Act 1995, tax on any income or profits, transfer duties payable under the Transfer Duty Act 1966, stamp duties payable under the Stamp Duties Order 1972 and any fees payable under the Deeds Registry Act 1967.

12 INCOME STATEMENT

An Income Statement has not been prepared as all expenditure and related income for the year has been charged to Capital Work-in-Progress.

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